

### REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are requested.

In response to the objection to the drawings as expressed in section 1 on page 2 of the Office Action, proposed drawing amendments in red for Figures 2 and 3 are provided herewith to show the "wireless module", "antenna" and "pen input device". The Examiner is respectfully requested to approve such proposed drawing amendments. Also, the substitute specification has been amended for consistency with regard to the proposed drawing amendments. No new matter has been added. The attached pages are captioned **"Version With Markings To Show Changes Made."**

In response to the objection to the disclosure as expressed in section 2 on page 2 of the Office Action, the substitute specification has been amended at paragraph [0015] and a corresponding proposed drawing amendment for Figure 2 is shown in red. The Examiner is requested to approve such proposed drawing amendment. No new matter has been entered.

The Examiner rejected claims 8-28 under 35 U.S.C. 103(a) as being unpatentable over Carroll et al. in view of SanGiovanni. This rejection is respectfully traversed as it pertains to amended claim 8.

In this regard, amended claim 8 recites that the first rotary mechanism allows the display unit to rotate relative to the forearm mounting unit about a first axis **that is sometimes parallel to said display screen**, and that the second rotary mechanism allows the display unit to rotate relative to the forearm mounting unit about a second axis **that is always parallel to said display screen**. This is shown with reference to Figures 1-3, wherein axis 6a is sometimes parallel to display screen 3 and axis 6d is at all times parallel to display screen 3.

Such first and second rotary mechanisms are not taught or suggested by SanGiovanni. In this regard, while rotary mechanism 112 of SanGiovanni allows the display unit 102 to rotate about an axis that is parallel to display screen 108 such that

rotary mechanism 112 can be said to correspond to either one of the claimed first and second rotary mechanisms, rotary mechanism 114 of SanGiovanni only allows the display unit 102 to rotate about an axis that is perpendicular to and never parallel to the display screen 108. Accordingly, rotary mechanism 114 cannot be said to correspond to either of the first rotary mechanism or the second mechanism as recited in claim 8.

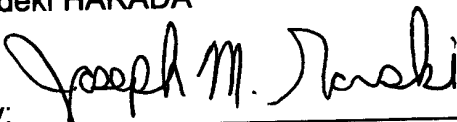
For this reason, any combination of Carroll et al. and SanGiovanni would not result in the invention as now recited in claim 8. Thus, claims 8-28 are allowable.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is earnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicant's undersigned representative by telephone to resolve such issues.

Respectfully submitted,

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Version with Markings to  
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8. A portable terminal comprising:

a display unit including a display screen;

a forearm mounting unit for mounting said display unit on a forearm of a user;

and

a hinge case including

(i) a first rotary mechanism for rotatably coupling said display unit to said forearm mounting unit so as to allow said display unit to rotate relative to said forearm mounting unit about a first axis that is sometimes parallel to said display screen, and

(ii) a second rotary mechanism for rotatably coupling said display unit to said forearm mounting unit so as to allow said display unit to rotate relative to said forearm mounting unit about a second axis that is always parallel to said display screen,

wherein said hinge case functions as said first rotary mechanism and said second rotary mechanism.

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[0012] Fig. 4 is a perspective view of a conventional portable terminal wearable on a forearm.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

5 [0013] An exemplary embodiment of the present invention will be described below while referring to Fig. 1 to Fig. 3.

[0014] Fig. 1 is a perspective view of a portable personal computer or a portable terminal, wearable on a forearm according to an exemplary embodiment of the present invention. Fig. 2 is a perspective view showing a state where the terminal is operated with a hand. Fig. 3 is a perspective view showing a state where a display unit is not operated. A display unit 2 of the portable terminal 1 has a display screen 3 composed of a liquid crystal display device and a touch panel, i.e. an input device. The unit 2 further incorporates a circuit board (not shown), a wireless module <sup>61</sup>(not shown), an antenna <sup>62</sup>(not shown), and a battery (not shown). A case of the display unit 2 is composed of a front cabinet 4 holding the display screen 3, and a back cabinet 5 made of rigid metal material. Reference numeral 6 denotes a hinge case comprising a first rotary mechanism, having an axis 6a, to which a forearm mounting unit 7 is rotatably connected, and a second rotary mechanism, having an axis 6b, to which the display unit 2 is rotatably connected. 15 The forearm mounting unit 7 has a forearm fixing band 8 for fixing the terminal near a wrist of a forearm of a user.

25 [0015] In Fig. 2, the portable terminal 1 is worn near the wrist of the forearm via the forearm fixing band 8 of the forearm mounting unit 7. First, by turning the first rotary mechanism 6a, the user moves the hinge case 6 and display unit 2 to a certain angle with respect to the forearm mounting unit 7, so that an x-axis <sup>50</sup> of the display screen 3 of the display unit 2 may become visible. Then, by turning the second rotary

mechanism 6b, the user moves the display unit 2 to a certain angle with respect to the hinge case 6, so that a Y-axis<sup>51</sup> of the display screen 3 may become visible.

[0016] As a result, the user can observe the display screen 3 adjusted to be nearly perpendicular relative to a visual axis of the user, and continue to operate the terminal while watching the display screen, without interrupting an operation being performed by the hand of the forearm on which the terminal is mounted. The user can input an operation through the touch panel easily without moving the arm on which the portable terminal 1 is worn.

[0017] The display unit is not operated in Fig. 3. To position the display unit as shown in Fig. 3, the user initially turns the second rotary mechanism 6b, so that the display screen 3 of the display unit 2 becomes positioned parallel to the hinge case 6, and that the display screen 3 faces the forearm mounting unit 7. Then, the user turns the first rotary mechanism 6a, so that the hinge case 6 and display unit 2 contact the forearm mounting unit 7. At this time, the back cabinet 5 of the display unit 2 faces outwardly.

[0018] That is, when the display screen 3 is not operated, the rigid back cabinet 5 of the display unit 2 faces outwardly, so that the display screen 3 and the internal liquid crystal display device can be protected from an unexpected impact.

[0019] According to the embodiment, the back cabinet 5 of the display unit 2 is made of rigid metal, but may be made of reinforced resin.

[0020] The axis 6a of the first rotary mechanism of the hinge case 6, and the axis 6b of the second rotary mechanism cross each other substantially perpendicularly. Under a condition that a user adjusted the display screen 3 almost perpendicularly to the visual axis of the user about the axis 6b of the second rotary mechanism, the user rotates the display unit about the axis 6a of the first rotary mechanism. Thereby, the visual axis of the user does not drift while the display unit 2 is turned right or left.

[0021] Moreover, since a wireless module<sup>61</sup> and antenna<sup>62</sup> are incorporated in the display unit, harness from the display unit 2 to an outside exterior thereof is not necessary, and structure of the hinge case is hence simplified. The harness is free from risk of disconnection due to rotation.

5 [0022] Further, the touch panel, as a pen input device<sup>63</sup>, which is embedded in the display unit 2 enables an input operation on the display screen 3 only around the forearm, and another input device is not needed.